U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
PCE Chestnut RV001 - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: **POLREP #13**
Progress - Vapor Intrusion, Soil, and Groundwater Sampling
PCE Chestnut RV001

Atlantic, IA
Latitude: 41.4036007 Longitude: -95.0138776

To: Adam Ruiz, RRSS

From: Jeff Pritchard, OSC
Date: 6/5/2018
Reporting Period: January 5, 2018 to June 5, 2018

1. Introduction

1.1 Background

Site Number:	B7A4	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	5/18/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	6/4/2015	**Start Date:**	6/4/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	IAN000703467	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Inactive Production Facility

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The PCE Chestnut Street site was identified during an investigation at the adjacent PCE Former Dry Cleaners site during March 2015, when analytical data from indoor air and sub-slab vapor samples collected within the downtown business district of Atlantic, Iowa, indicated elevated concentrations of tetrachloroethene, or PCE, unrelated to the PCE Former Dry Cleaners site. The concentrations of PCE vapors detected in the buildings at the site present a significant health threat due to inhalation hazards. The suspected sources of contamination are former dry cleaning operations at 317 Chestnut Street, 318 Chestnut Street, and 500 Chestnut Street. Subsequent investigations at the site have identified an area of PCE-contaminated soil associated with 317 Chestnut Street. A plume of PCE-contaminated groundwater has also been associated with this source area.

2.1.1.1 Current situation

During the current reporting period summarized in this Pollution Report, the EPA conducted two sampling events that involved the collection of soil, drinking water, and surface water samples. During the week of February 12, 2018, the EPA collected 12 soil samples from six locations below the basement of 315 Chestnut Street, which is the adjacent business north of the previously identified PCE-contaminated soil source area at 317 Chestnut Street. The soil samples were collected to further define the area of PCE-contaminated soil. In the samples, PCE was detected up to 1,700 micrograms per kilogram. This sampling event also involved the collection of a drinking water sample from a private well located downgradient of the groundwater plume associated with the site. No site-related contaminants were detected in that water sample.

During the week of May 23, 2018. The EPA collected two surface water samples from a city-owned pond north of the site and from the outlet of the pond which discharged to the East Nishnabotna River. No site-related contaminants were detected in either of the surface water samples.

Additionally, a structural assessment was completed for the buildings at 315 and 317 Chestnut Street. The assessment evaluated the structural integrity of those buildings and provided structural support recommendations for potential removal activities, including soil excavation.

A Site Inspection (SI) is also currently being completed for the site. The SI is primarily evaluating the vapor intrusion pathway. Based on the findings and preliminary Hazard Ranking Score (HRS), future involvement with the site may include the EPA Region 7 remedial program.

2.1.2 Response Actions to Date

To date, the EPA has installed vapor mitigation systems at nine properties at the site where elevated concentrations of PCE and/or TCE were identified in indoor air and sub-slab soil vapor samples. Please refer to previous Pollution Reports for a summary of those response actions.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRP search is ongoing. No PRP has been identified to date.

2.2 Planning Section

2.2.1 Anticipated activities for next reporting period

A EPA Region 7 - Regional Decision Team (RDT) meeting is planned for June 18, 2018. The RDT meeting is being held to discuss site status, as well as to evaluate future site actions which could be completed by EPA's removal and/or remedial program.

2.2.1.1 Planned Response Activities

See anticipated activities described in Section 2.2.1 above.

2.2.1.2 Next Steps

See anticipated activities described in Section 2.2.1 above.

2.2.1.2 Issues

No issues have been identified at this time.

2.3 Logistics Section

A Logistics Section has not been established for this site.

2.4 Finance Section

2.4.1 Narrative

An Action Memorandum for a time-critical removal action and a 12-month emergency exemption was approved on May 18, 2015. An Action Memorandum Amendment requesting a removal project ceiling increase was approved on December 21, 2016.

Estimated costs are summarized in the table below.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS and START	$302,400.00	$251,000.00	$51,400.00	17.00%
Intramural Costs				
Total Site Costs	$302,400.00	$251,000.00	$51,400.00	17.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

A site Health and Safety Plan has been developed, approved, and signed by site personnel.

3. Participating Entities

3.1 Unified Command

Because of the nature of the site, a unified command structure has not been formalized. Local and state representatives are kept informed of activities and issues through routine communication.

3.2 Cooperating Agencies

City of Atlantic

Iowa Department of Natural Resources

4. Personnel On Site

EPA Employees

START contract personnel

ERRS contract personnel

5. Definition of Terms

CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Service
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
PRP	Potentially Responsible Party
START	Superfund Technical Assessment & Response Team
TCE	Trichloroethene

6. Additional sources of information

PCE - A hazardous substance in CERCLA section 101(14) as listed at 40 CFR section 302.4. A man-made chemical that is widely used for dry cleaning clothes and for metal degreasing. It evaporates easily into the air and has a sharp, sweet odor. Exposure to PCE at very high concentrations (particularly in closed, poorly ventilated areas) can cause dizziness, headache, drowsiness, confusion, nausea, difficulty in speaking and walking, unconsciousness and death. PCE has been shown to cause liver tumors in mice and kidney tumors in rats. It has been determined that PCE is a Class 2A carcinogen via inhalation based on long-term exposure.

TCE - A hazardous substance in CERCLA section 101(14) as listed at 40 CFR section 302.4. A man-made chemical typically used in metal degreasing. The Agency for Toxic Substances and Disease Registry reports that inhalation exposure to TCE at very high concentrations may affect the central nervous system, with symptoms such as dizziness, headaches, confusion, euphoria, facial numbness and weakness. Recent studies have linked TCE with structural heart malformations associated with exposure during the prenatal period.

For more information on these chemicals go to:
http://www.atsdr.cdc.gov/toxprofiles/index.asp

Vapor Intrusion - Occurs when vapors produced by a chemical spill or groundwater contamination plume migrate through soil and the foundations of structures into the indoor air. When chemicals are spilled on the ground, they will seep into the soil and make their way into the groundwater. VOCs, including PCE and TCE, produce vapors that travel through soil. These vapors can enter buildings, through cracks in the foundation or a basement with a dirt floor, or concrete slab or crawl space.

For more information about vapor intrusion got to:
https://www.atsdr.cdc.gov/docs/vapor-intrusion_508.pdf

7. Situational Reference Materials

No information available at this time.